

February 28, 2003

FINAL RULE TO REDUCE TOXIC AIR POLLUTANTS FROM SURFACE COATING OF METAL FURNITURE

FACT SHEET

TODAY'S ACTION

- The Environmental Protection Agency (EPA) is issuing a final rule to reduce emissions of toxic air pollutants during application of surface coatings to metal furniture and associated cleaning operations. Toxic air pollutants, also called air toxics, are those pollutants known or suspected to cause cancer or other serious health and environmental effects.
- The final rule applies to all industrial facilities with metal furniture coating operations that are a “major source” of air toxics or are part of a facility that is a “major source” of air toxics. A “major source” emits 10 tons per year or more of a single toxic air pollutant listed in the Clean Air Act or 25 tons per year or more of a combination of those pollutants.
- Metal furniture surface coating is the process of applying a coating (usually protective or decorative) to a piece of metal furniture or a metal furniture component. Metal furniture includes items such as household and office furniture; restaurant, beauty, and barber shop furniture; institutional furniture such as for hospitals and public buildings; office and store fixtures, shelving and lockers, and lamps and lighting fixtures.
- Based on currently available information, EPA estimates that there are approximately 3,000 metal furniture facilities nationwide. Approximately 655 of these facilities are major sources of air toxics emissions and will be affected by this rule.
- The final rule will require existing metal furniture surface coating facilities that are subject to the rule to limit air toxic emissions to 0.10 kilogram toxic compounds per liter of coating solids used (0.83 pound/gallon). These facilities will have up to 3 years from the date of publication of the final rule to comply with its requirements.
- New facilities will need to use coating materials that do not contain air toxics. However, the final rule allows a new affected source to demonstrate on a case-by-case basis that toxics-free coating technologies cannot be used for specific applications. Under such circumstances, and upon approval by the EPA Administrator, the facility would be required to meet an emission limit of 0.094 kilogram toxics per liter (0.78 pound/gallon) of coating solids used.
- For both new and existing sources, the emission limits represent levels that can be met by pollution prevention techniques.

BACKGROUND

- Under the Clean Air Act, EPA is required to regulate emissions of 188 listed toxic air pollutants. The Act also requires EPA to identify industrial or “source” categories that emit one or more of these pollutants. The Clean Air Act requires EPA to develop emissions standards requiring stringent air pollution reduction measures for each of the identified source categories.
- EPA’s published list of industry groups to be regulated includes metal furniture surface coating operations.
- Air toxic emissions from metal furniture surface coating facilities occur from 1) the coating application operation, which includes curing and/or drying of the coating, and 2) from the evaporation of organic cleaning materials used to prepare the surfaces before coating is applied and to clean equipment and tools.
- Metal furniture surface coating operations emit a number of toxic air pollutants including xylene, toluene, ethylene glycol monobutyl ether and other glycol ethers, ethylbenzene, and methyl ethyl ketone. Health effects associated with these pollutants include eye, nose, throat, and skin irritation; nausea, vomiting, headache, and dizziness; and liver and kidney damage.

BENEFITS AND COST

- The final rule will reduce total emissions of air toxics by 16,300 tons in the 5th year after rule becomes effective. This is a 73 percent reduction from the estimated 1997/98 baseline.
- Many of these air toxics are also volatile organic compounds. These compounds contribute significantly to ground-level ozone, or smog, which has been shown to cause adverse effects on human health and can damage forests and crops.
- EPA anticipates that all new metal furniture surface coating facilities will reduce potential air toxics emissions to less than the major source threshold. As such, new sources will be considered “area sources” (rather than major sources) and not subject to the rule. For this reason, no emission reductions or compliance costs for new sources are attributable to the rule.
- EPA expects new sources to utilize powder coating technology or toxics-free liquid coatings. Although there could be higher capital costs associated with constructing a powder coating facility, the lower annual operating costs of such operations would help to recover any differential capital expenditures, in a relatively short time.

- EPA estimates that the total nationwide annualized cost in the 5th year after the final rule is promulgated would be approximately \$14.8 million.
- After assessing the impact of the final rule on small businesses, EPA determined that it will not significantly impact a substantial number of small businesses.

FOR MORE INFORMATION

- To download the standards from EPA's website on the Internet, go to "Recent Actions" at the following address: <http://www.epa.gov/ttn/oarpg/ramain.html>.
- For general information about the final rule, contact Dr. Mohamed Serageldin of EPA's Office of Air Quality Planning and Standards, Emission Standards Division, Coating and Consumer Products Group at (919) 541-2379, or by electronic mail at: serageldin.mohamed@epa.gov. Or visit the metal furniture (surface coating) website at <http://www.epa.gov/ttn/atw/mfurn/mfurnpg.html>.
- The EPA's Office of Air and Radiation (OAR) homepage on the Internet contains a wide range of information on the air toxics program and many other air pollution programs and issues. The OAR's home page address is <http://www.epa.gov/oar/>.
- This source category was assigned electronic docket number OAR-2002-0048.